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OHIO CULTIVATOR.

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EDITOR AND PROPRIETOR.

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Address M. B. BATEHAM, Columbus, O.

Thoughts on Agriculture.

That the system of farming generally pursued in this country is susceptible of great improvement, will not be denied by any man of common intelligence. Agriculture is far behind most other arts and sciences at the present day; and why this is so I am at a loss to conceive, since it is the source from which all classes and professions must derive their support. The farmer is truly the "bone and sinew" of the community; his occupation, if pursued with energy and skill, gives life and motion to all other departments of industry. Seeing, then, that agriculture is the master wheel of our whole political machinery—the foundation and support of our wealth and prosperty—how is it that the occupation of the farmer has come to be looked down upon by man as degrading, or less honorable than the "professions," or even mechanical pursuits? This is a common and hurtful error among farmers, inducing them to send their sons to study a profession or learn a trade, instead of training them to their own calling, and endeavoring to elevate that calling by bringing into its service more of INTELLIGENCE and SCIENCE.

Let the farmers of this country pursue their business with increased energy and skill, and let our young men be induced to see that *farming is a science*, which invites them to bestow upon it the best powers of *educated minds*, and our profession will no longer be held in disesteem; farmers will become respected as men of high intelligence, of education and true science, and their sons will be proud to follow the occupation of their fathers.

Another great evil among farmers, and one that bears heavily against the progress of improvement, is, the *spirit of speculation* which too generally prevails in this country. Occasionally a farmer is seen who invests his surplus income in improvement of his farm, thereby increasing its productiveness and beauty, and affording increased means of enjoyment to himself and family; but the great majority expend all their means in the purchase of more land than is useful to them—even incurring large debts for this purpose, on which heavy interest must be paid, with increased taxes, and generally much trouble and vexation.

Will not the farmers' own paper, the Ohio Cultivator, give its friendly warning against these errors; and, especially, will not the friends of agriculture in Ohio take more pains to place this means of warning and stimulus to improvement in the hands of a majority of the farmers throughout the State? It will aid them in conducting their operations with success, and inspire their sons with a love for the profession of their fathers.

M. Oldham.

Guernsey Co., O.

Remarks.—Yes, friend Oldham, there's the rub! Tell us how to induce "a majority of the farmers of Ohio" to subscribe for and read the Ohio Cultivator, or other agricultural papers, and we will guarantee that but few years will elapse before the work of agricultural improvement will go on with more rapidity than has yet been dreamed of; and you will then have little occasion to deplore the evils you have alluded to.—Ed.

Uses of Soap Suds.

At Towne's Hotel, in Warren, Trumbull county, we saw an Isabella grape vine, said to be but three years old, planted under the kitchen window, which had climed to the second story, a good way towards the ridge pole, and extended its branches around the corners of the building to a distance not less than twenty or thirty feet, and from within four or six feet of the ground to the extremest branch was full of clusters of fruit. We were assured that the only extra advantage it had was watering it well, nearly every day, with dishwater, and occasionally soap-suds. The following is from one of our exchange papers:

Soap-Suds.—The finest peach and apricot trees that we have ever seen, received a weekly or monthly wash of soap-suds, after the clothes of the family had been duly cleansed. A bucket full to a tree, taking them in rotation, answers a capital purpose to destroy the eggs of insects and supply potash where it is much needed. Never waste in a sewer, or about the kitchen, a fertilizer so valuable as soap-suds.

A Lesson in Engineering.—"My son," said an engineer, "come hither; I want to show you something."

"Well father, what is it?"

"Do you see this kettle bail?"

"Yes sir."

"There" standing it up perpendicularly on the table, "do you see that?"

"Yes sir."

"Well then," laying it down upon the table, "do you see that? Well, it is no farther round that bail as it lies flat than it is over it when it stands up. So, when you come to a hill, remember it may be no farther round the the base than over the summit, while it is a great deal easier."

In our travels through the hilly portions of Ohio, we have often had occasion to regret that those who first located the roads had not learned the above lesson in engineering.

Samples of Fine Wool,

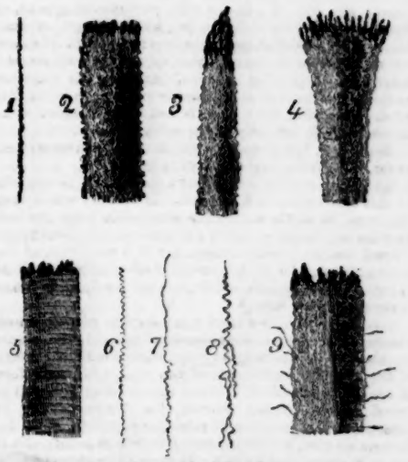
(*With Illustrations of the different Qualities of Wool.*)

Mr Chas. L. Fleischman, formerly engaged in the U. S. Patent Office, made an agricultural tour through the continent of Europe, in 1845-6, and gave particular attention to the subject of wool growing—the breeds and management of sheep—the countries where the finest flocks are found, &c. The result of his observations on this subject are given in a very able and valuable communication, with numerous engravings, in the late report of the Commissioner of Patents. This report on sheep and wool, by Mr. F., we are confident, will be found of great value to sheep farmers, and we advise all such as are in favor with members of Congress to endeavor to obtain a copy of the volume. Owing to the number of copper or steel engravings, we cannot copy the article with advantage. We have appended an abridgment of his remarks on the qualities of fine wool, with about half of the illustrations; but justice cannot be done to the engravings by cutting them on wood, as has to be done for printing in a paper like ours. We shall give further extracts at another time.

Mr. Fleischman says, the finest wool has not of late years been produced in Saxony as formerly, but in Prussian Silesia; and much of his article relates to the breeds and management of sheep in that country.

Mr. F. has also furnished to the Commissioner of Patents a large number of samples of wool from the most celebrated flocks in Europe, which have been arranged neatly on cards, with a printed descriptive catalogue—and one of these cards (of 18 samples,) sent to the Governor of each State in the Union. The card sent to the Governor of this State has been deposited in the State Library, where it can be seen by all who choose. The first six samples are from the best flocks in Prussian Silesia—supposed to be the finest flocks of sheep in the world. The remainder are from celebrated Hungarian, German, and other flocks; part of them in the natural State, and others washed specimens. The first six, and some of the others, are indeed remarkably fine. They show a larger amount of gum or yolk than is commonly found in the finest flocks in this country.

The following remarks and engravings are copied, with some abridgement, from Mr. Fleischman's essay. We hope they will assist some of our readers in learning how to judge of the quality of wool, and thereby aid them in selecting and improving their sheep:



On the formation and growth of Wool, especially of Merino Wool, as well as respecting the considerations which are to be regarded in the breeding of Sheep.—The wool of sheep does not grow, as does the hair of other beasts, in a manner that every individual hair takes its own direction, but its many threads of wool unite always into one little tuft, and each of these again stands in such connection with the rest as may allow every wool pelt* (every fleece,) as a whole to appear like a web. The single tufts we call the *staple*. Fig. 1.

The *formation of the staple* may easily be discerned in the surface of the fleece, which contains on it web formed furrows, woolly seams, but will be more noticeable if one lays the same out together in any particular place. If we examine the staple more closely, we may discern in it the so called *strands*, (still smaller bunches,) in which many threads of wool are closely connected. Strands of different forms, different fineness, or of an irregular curl, transfer these peculiarities to the staple, whereby yet further the exterior of the whole fleece is affected. We may, with tolerable certainty, from this form, and from the state of the staple, draw a conclusion as to the condition of the threads of wool, and correctly assume that the wool which has a good structure of staple must also possess the other good properties which render it a valuable article. But the inverse of this does not hold, because the condition of the sheep, dust and smut, moist and musty fodder, frequently the soaked state of the fleece, &c., may give to the staple a faulty appearance, without affecting the goodness of the wool, or being injurious for the whole life time of the animal.

The wool itself appears otherwise, in the staple, much shorter than it really is in its extended state, because by its curl it is very much contracted. This is so much the more the case, as the smaller and more regular are the bends of the single threads of wool, the more it allows itself to be stretched out far beyond the length of the staple, indeed to double the unstretched length of the same. Such we call wool with *short contracted staple*, and such as scarcely allows itself to be stretched to half its length, or yet less, wool of a *long extended staple*.

The staple itself must approach a cylindrical shape where it is well formed, and be round and smoothly terminated (blunt) on the upper end, (See Fig. 2,) and not flat or pointed. A too large and broad staple, which

*Strictly speaking, there is a distinction between pelt and fleece. Wool is called pelt so long as it is still on the body of the animal, and fleece when shorn, but still remaining in its natural state.

gives the upper surface of the fleece a thick closeness, leads to the probable inference that the wool is harsh, yet the staple often appears of greater circumference, that is, more extensive, than it really is, while a stronger and larger staple in extent is frequently composed of a greater number of small ones.

If the staple comes out strikingly pointed, so that it ends with a hairy point, this shows that many hairs do not reach to the top, either because they are shorter, or because they have an irregular growth, and, on this account, the single strands do not lie continually near to each other. See Fig. 3. Such uneven grown wool is called *untrue*, not clear, and causes many difficulties in the manufacture; hence we consider this peculiarity as among the principal defects of wool. A clear, true wool, which is valued above all, on the contrary, is that in which the strands of the staples lie parallel to each other, because the single threads are of equal fineness, and their curves of equal size and form.

If the points of the staple stand out very far, we say that the wool is pointed. If, besides, they are underneath pretty strong, and many stick out far, then the surface of the fleece has a stiff appearance like a reed, which is likewise a fault.

If, on the contrary, the staple is thicker and stronger above than below, then, too, the single fibres are coarser above than below, and thus it is not fitted for an even yarn. See Fig. 4. Sheep with such staples appear, on the first view, very rich in wool; but, on closer examination, by no means show themselves to be such. We must not confound with these staples otherwise well formed, which, as frequently happens, have become stronger, rougher, and harsher on the upper surface, on account of dust, smut, rain, &c. This is not to be regarded as an intrinsic fault, but only as an outward disadvantageous disfiguration, the causes of which may be avoided, and, so far as possible, ought always to be so.

The staple must, further, stand upright. The opposite to this case indicates flabbiness. It is only when very fine wool is at the same time somewhat long and soft that the staple can maintain any erectness, but even then it must not be wholly flabby; for this would be, at the same time, a proof of the poorness of wool and its want of compactness, which, indeed, are not rarely to be found in sheep of such wool.*

When the wool is curled more on one place than on another, and many staples also stand upright, while some are blunt, and others again pointed, this is then a mark of the greatest unevenness of the wool, and the surface of the fleece maintains a bushy appearance; but, if it is found only somewhat uneven, (as it were wavy,) in otherwise even growth and tolerable compactness of the fleece, and also, without showing defective points, this is not to be considered a fault. It sometimes happens with sheep of very fine but somewhat long and soft wool, when the same are poorly fed.

It is defective when the wool on the back of the sheep parts and hangs down loose on the sides. It then not only wants the necessary connection, and also many other good qualities, but it is also often washed out by rain on the back, and thus becomes rough, harsh, and coarse pointed. Generally, a fleece should not open itself, but present itself more closed; the former is always a sign of a thin state of the wool. If the staples are, also, at the same time, loose and drooping, such fleeces are called flabby or shaky. They have especially the defect, that outward influences operate more disadvantageously on them than on the closed kinds. Much as a closed fleece is desired, the surface of the same must not appear like a board, because then usually the staple is too large and flat, and the high degree of fineness is lost to the woolly fibres. The fleece must more resemble a soft, elastic, even cushion. If the surface is not wholly smooth, but is covered with little soft knobs, (hard ones they must not be,) as if with pearls, then this shows a great softness of the points which is approved. If the wool appears, on parting it on the body of the animal, as a uniformly woven cloth, while many staples are apparently joined into one whole as it is said, the wool is full, and is not therefore of less value, because it is regarded as a mark of the truth, purity, and similarity of the particular fibres, (*evenness.*) So, too, it is approved, when the staple, on closer examination, shows continual indentations across its whole breadth, for such are always the signs of evenness, purity, and compactness of the fleece. It is called *meshed*, because the wool has a resemblance to striped stuff, or knit stockings. Fig. 5.

Wool is called *strongly marked* when the curves of the single fibres are very high and perceptible, but are uniform. Fig. 6. But, if the curves are uneven, sometimes small and sometimes large, (Fig. 7,) and many of the small ones run together again into the greater, and twist the strands together in particular places, so that they appear winding at these points like a corkscrew, (Fig. 8,) then the wool is called *twisted*. This is a worse fault, because twisted wool cannot be well spun in the spinning machines, and does not produce smooth cloth. We must therefore labor to the utmost to counteract this fault, which usually affects the withers of the sheep between the shoulder blades.

When the not clear wool (already explained above,) is found in so great a degree that the strands in many places lie closer together than in others, and the curves of the particular fibres are very different in form and size, the wool is called *tangled*, and in a yet higher degree, *felted*. This fault may sometimes arise out of a disease, a sickly, weak state of the sheep; and besides, is probably an original tendency. In an unblemished fleece, not a trace of felt is to be met. The fibres of wool belonging to a staple must have been so perfectly closed together, that the particular staple from the surface of the fleece to the foundation may be fully separated from each other, without the particular fibres running up, across, or in streaks, from one staple to another, as it were binding it, and probably passing through many. Such fibres, which usually are smooth and extended, and so appear longer than others, are called *bind* or *false hairs*; and then, when they pass in through many staples and lie in upon the surface, are called *overrunners*.* Fig. 9. These last are sometimes to be found in old bucks, though they were formerly celebrated animals, when they have been strongly used for breeding.

Another serious fault is the stratified appearance of the wool, which is especially found in the best blooded sheep, when they are suddenly transferred from a good rich nutriment to a scant meagre one, or are strongly affected by hard birth, strained sucking, and other similar circumstances, or are weakened by any disease. If, for some time, there is a stagnation in the growth of the wool, it remains stationary. If it then grows again, afterwards, irregularly, the new growth does not attach itself to the old; and we notice, after some time, running across through the staple, a streak like an offset, where the fibres of wool are weaker, scantier, (*hunger fine,*) and also have lost in tenacity as well as in elasticity. This causes the more injury, because, in the preparation of the wool, it tears in those places.

But besides the peculiar wool, all sheep have, in particular places of their bodies, real hairs, some more, some less. Of these are reckoned:

1. The so-called *dog hairs*, which are especially found on the hind shanks, and also on the heads of certain animals, yet seldom in considerable quantity. These hairs are coarse, long, smooth, without curves, shiny, harsh, and almost without elasticity.

2. *Stichel hair*, short, stiff, shiny, strong below, above very pointed, which are found singly in every fleece; but only hang loose therein, fall out in shearing, or in sorting, and therefore do not depreciate the value†.

3. The hairs with which many lambs are covered at their birth, sometimes thickly, sometimes only singly, in addition to the small locks, in which the wool staple is to be recognized. They are soft, short, and pointed, and generally fall out, leaving a place for the wool. It has been remarked, that lambs which come into the world with such hairs are peculiarly rich in wool. The better sort of wool shows, after a full year's growth, at the time of the usual shearing of wool, either short, compressed staples, (1—1½, or at the highest, 2 inches long,) which are small, blunt, and perfectly cylindrical, but well rounded above, which form a close, nearly even, or cauliform surface of the fleeces; or if it is long stapled, slightly curved, it is of a more sleek character. The staples, in this case, are three inches or above long, and do not end roundly but more in a pointed form, and yet without having any faulty points. The short stapled, as it is called, is the *card wool*, as the long staple is the *comb wool;* the first is used for making cloths, the second for smooth fabrics. If both sorts of wool unite the like fineness, smoothness, and softness, without any faults in growth and formation of staples, then have both an equal value.

In order to learn how to prove the fineness of the fibres of wool by the eye, the eye must be practised by the comparison of many sorts of wool. If they are laid on a black underground, near each other, and the single fibres are often compared with each other, a considerable skill is acquired after a little observation. The surest standard is, after all, a well experienced eye.

*This refers especially to Merinos; for, with the peculiar long woolled races of sheep (to which partly the English sheep, the sheep which are found in the north German flats, the so-called *Zackel* sheep, and others belong,) usually the wool hangs more than it stands up.

*When one runs his fingers, as if with a comb, through a wool coat which is affected with bind hairs, the last remain between the fingers. Besides they are likewise seen by the eye; when one lays open a wool coat to the light, the bind hairs then offer some resistance.

†This does not much depreciate the value of the wool, but much injures the worth of the animal from which it comes, as a breeding animal, especially when the stichel hairs are very hard and dry. It is regarded as a mark of a less noble animal, while the tendency to hardness is apt to prevail in the reproduction of wool. Mildness and softness is that peculiarity at which the sheep breeder has to aim more than any other.

On Making Hay.

Mr. Bateham:—The season for making hay having arrived, I take the liberty to offer a few hints on the subject for the consideration of the readers of your useful and interesting paper.

Motives of humanity, as well as of interest, should induce farmers to provide for the brutes dependent on their care a supply of nutritious food; and the difference between early cut, properly cured, good hay, and that which is cut late or mismanaged, is not a matter of that consideration, with many farmers, which it ought to be; especially when the labor and care necessary to secure hay of the former description conflict with present convenience.

It is true there are conflicting opinions among scientific and practical farmers with regard to the best time for cutting, and the most proper manner of curing grass to make hay of the best quality. Some contend that grass should not be cut till it is *ripe*, or the seed matured; others, that it should be cut green, or while in blossom. Some prefer curing it without sun as much as possible, while others are in favor of a contrary course. It may not be amiss to examine the theories on which these different opinions are founded.

And first, it is contended that ripe cut hay has more "substance," and will "go further" than that which is cut in an unripe state. Though this theory, which has many advocates, may have the merit of plausibility, yet it is to be doubted whether such hay has that kind of "*substance*" which affords most *nourishment* to animals; and admitting what is claimed in its favor, that it will "go further" in *feeding*, will it go so far in *supporting* stock? Experiments fairly conducted will show the contrary. If nutriment is sought in the *seed alone*, then let it mature; but if in the body of the hay, then it should be cut while the nutritive properties are yet in the stalk and leaf, and before they are principally exhausted in the formation of seed.

Another plea in favor of late cutting is, that grass (Timothy especially,) will "run out," unless a part of its ripened seed is scattered over the ground each year, to replenish that which dries out in consequence of cutting, drouth, or frost.

From my own observation, I am inclined to the belief that the later grass is cut the more danger there is of its "running out." We depend for a succeeding crop on shoots from the old roots, not on that which springs from seed accidentally scattered the year before; and new shoots are certainly more likely to spring up from the roots before their powers of reproduction are exhausted in the formation of seed than afterwards. But admitting the validity of this plea, the farmer will find his interest promoted, in the superior quality of his hay, by cutting early, and sowing seed, if necessary, to replenish his meadows, harrowing the ground with a light, sharp harrow.

Some, perhaps, who delay cutting their grass till it is ripe, console themselves for their loss in quality by the time they save in curing; but the time they save is dearly purchased. They cheat their cattle—exhaust their soil—and the loss in the after growth itself is of more consequence than every thing gained.

The editor of the Albany Cultivator, I recollect, once advised the adoption of the same rule in regard to cutting grass that is practiced in cutting medicinal herbs; and for the rule gave a sound reason. "The object in both cases," he remarked, "is to secure the intrinsic virtues of the plant." And surely the "plant," the stock, and leaves contain the most "intrinsic virtues," before they are used for the formation of seed. But I think his analogy should have stopped there. The theory that either herbs or hay should be cured in the "shade," to prevent the "evaporation" of their "valuable properties," will not stand the test of experience. At any rate, their "valuable properties" are more likely to be evaporated by the *sweating process* he recommended, than by the influence of the sun and air. The sun and air are the best agents in the curing process; but it should never be wet, during the process, either by rain or dew, if it can possibly be avoided. Nor should it be exposed to the sun, and atmospheric influences, no longer than is necessary to cure it sufficiently; but I should never expect to improve the quality of hay by curing it in the shade, or with very little exposure to the sun.

It is true many intelligent farmers recommend and practice, with obvious advantage, curing clover in the cock, without much exposure to the sun; but the object is not to improve the quality of the hay, but to prevent the loss of the most valuable part, the leaves and heads.

After all that can be said, the grand secret of hay making consists in a knowledge of the true criterion of its quality: it should retain its natural green color, and fine aromatic smell, to the highest possible degree; and the farmer who succeeds best in preserving these will have the best hay. But the shameful mismanagement and slovenly practice of many farmers, in hay making, cannot be too severely reprehended.

J. Townsend.

Falls T'p, Muskingum Co., July 7, 1848.

The Locust Cicada coming next year--Injury to Fruit Trees.

We have seen it stated that the Locusts appeared in great numbers in some parts of Western Pennsylvania, and in the adjoining counties of Ohio in the summer of 1832. Will some of our readers in these parts inform us whether such was the fact? for if so, these singular insects will most certainly appear again in these parts next year, (1849) being 17 years after their former visit.

Another subject in connection with this insect has not been noticed in our columns; that is, the question whe-

ther the larvæ of these insects do much if any injury to fruit trees. We hope if any of our readers have opportunity to examine the roots of trees where the locusts were numerous in 1846 they will take pains to make careful search for the larvæ and inform us if any are discovered.

Our attention was called to this subject by reading an article in a late number of the *Horticulturist* in which is given the substance of a communication by Miss Morris written in 1846, to the Academy of Natural Sciences of Philadelphia, which we subjoin:

"I have for a number of years, believed that the failure of fruit on trees over twenty years old, was mainly owing to the ravages of the larvæ of the *Cicada septemdecim*, though entomologists have heretofore considered them harmless, or nearly so, believing that the principal injury caused by them was received on the branches of the trees when depositing their eggs. But from the fact of their burrowing into the earth the moment of their escape from the eggs, and their living, as all acknowledge, on the sap of the roots of plants, I was led to think that the constant drain of sap required to nourish so many thousands of grubs, of from a quarter of an inch to an inch in length, must be more than a tree could live through, and yield good fruit. I was confirmed in this opinion, by an experiment made by J. B. W., New York, and published in the November number of the Horticulturist, page 227. The method prescribed to renovate an outcast, is to dig a trench four feet wide and twenty inches deep, around the tree, leaving a ball of earth six feet in diameter, and then to fill the trench with rich earth and compost. The author states that the experiment succeeded, and that in three years the tree was in a flourishing condition and yielded fine fruit. The writer attributes the change to the new and rich soil with which he supplied the tree. I argue, that on cutting off the larvæ of the *Cicada*, which he did when he cut off so large a portion of the roots, he removed the real disease, and the tree was then in a condition to take advantage of the congenial soil placed around it; and new life was given to the roots and branches. Under this impression, I superintended a similar experiment on a pear tree that had been declining for years, without any apparent cause, and agreeably to my expectations, I found the *larvæ* of the *Cicada* in countless numbers clinging to the roots of the tree, with their suckers piercing the bark, and so deep and firmly placed, that they remained hanging for half an hour after being removed from the earth. From a root a yard long, and about an inch in diameter, I gathered twenty-three larvæ; they were of various sizes, from a quarter of an inch to an inch in length. They were on all the roots that grew deeper than six inches below the surface. The roots were unhealthy, and bore the appearance of external injury from small punctures. On removing the outer coat of bark, this appearance increased, leaving no doubt as to the cause of the disease.

"The larvæ were enclosed in a compact cell of earth, with no outlet except that in immediate contact with the root, and as there were no galleries or holes leading from these cells, I infer that the grubs never leave the roots they first fasten on; which may account for the great difference of size: the small ones being starved specimens of the same brood; though I am inclined to believe that there are two species, differing sufficiently in size to account for the discrepancy in the size of the larvæ now found. I noticed this difference in 1817, and again in 1834: the note of the smaller variety, or species, is much shriller than that of the larger, and will never be mistaken when noticed.

"The *Cicada* is too well known to need a description here; I will therefore only notice its habits, as they have fallen under my own observation, and make a few extracts from an article published in the National Gazette, and written by my brother, Mr. Thomas W. Morris, in 1834.

"The eggs require forty-two days to mature in the branches of the tree; they then burst the shell and appear, a minute but active fac-simile of the parent in the larvæ state, except the absence of the wing cases; they require but a few moments to stretch their limbs and prepare for labor, before they unloose their hold on the twigs on which they had been deposited, and fall to the ground, where they immediately disappear in search of food to the roots of the tree. If the eggs that are about to hatch, be placed over a glass jar filled with earth, the young grubs will, in a few hours after their escape from the eggs, be seen at the bottom of the jar, endeavoring to force their way still deeper. When first hatched, they are quite white, but soon change to yellowish brown. They exist in separate tribes, occupying different sections of country; making their appearance in different years, but invariably after the same interval of time. For a year or two before the arrival of the main body, a few scattered individuals are generally found."

Mr. Morris thus describes them, as noticed by him at various times and places:

"In November, 1812, I found a large number of locust grubs under an old apple tree, between two and three feet below the surface, having every appearance of such as now issue from the ground, and nearly of the same size. On the 27th of June, 1815, I saw a portion of one of their countless tribes west of the Alleghany mountains, extending from the summit of the Chestnut ridge into the State of Ohio, beyond Steubenville; occupying every shrub and tree, except the pines, and the walnut, hickory, and some of the same family. On my return in the latter end of the following month, not an individual of the myriads which had occupied that space, was to be seen; the tops of the forests, for upwards of a hundred miles, appeared as if scorched by fire. In 1832, just seventeen years after, I noticed a newspaper paragraph, which stated that the locust had appeared in that neighborhood in large numbers.

"The northern parts of Pennsylvania and New Jersey were visited by them in 1826, when I had another opportunity of seeing this extraordinary insect. On my way from Easton, through New Jersey to Milford, in Pike county Pennsylvania, I fell in with a very numerous body; how far they extended, I was unable to learn, but they did not disappear from my route until after passing through a large part of Pike county, a distance by the road, of more than sixty miles from the place where I saw them on the 22d of May. Trees and shrubs are necessary as places of deposit for their eggs; consequently, though numerous in the State House Square, none were to be found in Washington Square, which, in 1817, was destitute of trees."

Dr. Harris in his treatise on insects gives an interesting article on the natural history of the Cicadæ, and states that they appeared in Western Pennsylvania and in Genesee county New York, in 1832; so we may confidently look for their re-appearance in those parts the coming year. (The advice of our friend Dr. Barker, contained in our paper of June 15, may be of service to such as contemplate planting orchards in regions where it is known that these insects appeared in 1832.)

Speaking of the habits of the larvæ, Dr. Harris says:

On reaching the ground the insects immediately bury themselves in the soil, burrowing by means of their broad and strong fore-feet, which, like those of the mole, are admirably adapted for digging. In their decent into the earth they seem to follow the roots of plants, and are subsequently found attached to those which are most tender and succulent, perforating them with their beaks, and thus imbibing the vegetable juices which constitute their sole nourishment.

They do not appear ordinarily to descend very deeply into the ground, but remain where roots are most abundant; and it is probable that the accounts of their having been discovered ten or twelve feet from the top of the ground have been founded on some mistake, or the occurrence of the insects at such a depth may have been the result of accident. The only alteration to which the insects are subject, during the long period of their subterranean confinement, is an increase of size, and the more complete development of the four small scale-like prominences on their backs, which represent and actually contain their future wings.

As the time of their transformation approaches, they gradually ascend towards the surface, making in their progress cylindrical passages, oftentimes very circuitous, and seldom exactly perpendicular, the sides of which, according to Dr. Potter, are firmly cemented and varnished so as to be water-proof. These burrows are about five eighths of an inch in diameter, are filled below with earthy matter removed by the insect in its progress, and can be traced by the color and compactness of their contents to the depth of from one to two feet, according to the nature of the soil; but the upper portion to the extent of six or eight inches is empty, and serves as a habitation for the insect till the period for its exit arrives. Here it remains during several days, ascending to the top of the hole in fine weather for the benefit of the warmth and the air, and occasionally peeping forth apparently to reconnoitre, but descending again on the occurrence of cold or wet weather.

During their temporary residence in these burrows near the surface, the Cicada grubs, or more properly pupæ, for such they are to be considered at this period, though they still retain something of a grub-like form, acquire strength for further efforts by exposure to the light and air, and seem then only to wait for a favorable moment to issue from their subterranean retreats.

To Prevent Mildew on Gooseberries.

The question has often been asked, how can the gooseberry be grown in this country free from mildew; and many devoted lovers of this fine fruit have been compelled to abandon its cultivation on account of the destruction caused by this malady. We are in hopes, however, that a remedy, or rather prevention of the evil has been discovered, and that our old country friends, especially, may yet have the satisfaction of growing large and fine gooseberries in this country.

In a recent visit to Hon. Jas. Matthews, of Coshocton, who has a fine assortment of this fruit, we found the best kinds almost entirely ruined by the mildew. His bushes grow on a sandy soil, and are fully exposed to the sun. In the garden of John Miller, of this city, several bushes of the large varieties are loaded with fruit, quite free from mildew. They grow on moist clayey soil, and are shaded by a fence and building. This exactly corroborates the often expressed opinion that our climate is too hot and dry for this fruit, and the difficulty must be remedied by selecting the soil and situation, or peculiar cultivation, such as the application of salted hay, &c., to the surface of the soil beneath the bushes—which has been recommended as very effectual in preventing mildew.

The following article we find in the late Report of the Commissioner of Patents, credited to the Cleveland Herald. It is from the pen of Dr. J. Barret, of Middletown, Connecticut:

On the Cultivation of the Gooseberry to secure it from the Scab.

That useful and valuable fruit, the gooseberry, which is now considered so important in Europe, is with difficulty raised here, the berry so soon becomes scabbed or covered with a dirty fungus. This takes place too in gardens where every care has been bestowed on them. This excess of attention in keeping them free of weeds and grass, and exposing them to the hot weather of August and September, proves highly injurious and contrary to their nature.

I am fully convinced, after much observation that the mode of culture with gooseberries in England will not apply to this region. I have had ample opportunities of witnessing what has been accomplished in England, and what has been attempted here, and now see the cause of failure.

In the notes I have kept on the progress of vegetation, and the ripening of fruits for 1837, which was a remarkable wet season, there is the following entry: "July 12.—The gooseberries this year are better than I have seen them for several years past. The shrubs as well as the fruit are less coated with a fungus which spoils the berries." It appears, therefore, that a wet season is peculiarly suited to the gooseberry. That the season of 1837, was remarkable for its wetness, will appear from the following table kept at Albany, N. Y. [See Report of Regents for 1838.

1837, Rain—April,	1	inch	63 hundredths.
May,	7	do.	34 do.
June,	5	do.	06 do.
July,	4	do.	38 do.

It is satisfactory to find that a wet season which is injurious to many fruits, causing them to decay rapidly, is congenial to the gooseberry. The season of 1846, as to amount of rain has resembled that of 1837, and has suited this fruit. With this knowledge we may hope to commence a new era in the cultivation of the gooseberry, which may be highly useful in some sections.

I would here briefly state, that the secret and success in cultivating the gooseberry in this place, free of scab and securing a full crop, is to grow them in grassy places, or grass borders sufficiently wide, and allow the grass to grow rather luxuriantly among them, until they have attained their growth and are thereby secured from the forming scab.

When the berries begin to ripen, the grass should be cut, being no longer required. I saw many years ago, in Vermont, some excellent gooseberries growing in wet shady places, and among grass and plants. I also most unexpectedly found a stray gooseberry bush growing among tall rye, and bearing a full crop of excellent fruit. I give these instances to show that the gooseberry is fond of shade and moisture in this climate, and that to grow them with success in the garden, abundant dew and moisture must be provided, and this the grass fully supplies. There are two gardens within the limits of this city, which have produced gooseberries from year to year, entirely free of scab, when all others we may say generally had their fruit ruined. These I ascertained were grown rather by negligence than design, at first among the grass. One of the gardens belonged to the Rev. Dr. Jarvis, the other to Mr. John Bliss. The latter assures me, he has not failed during about twenty years in having his gooseberries free from the scab. I purposely watched these gardens attentively as well as several others, to give a faithful report of this novel mode of culture, which promises so much. I found them nearly ripe July 4. The berries were of the red kind of medium size. The bushes required the aid of props to secure them from breaking under their load of fruit. As to the quantity I was highly gratified to observe that they bore as largely as the best examples that I had seen in England.

The gooseberries in the garden of the Rev. Dr. Jarvis, grew on a long strip of grass, about four feet wide. They are not, I apprehend, the largest and choicest fruit, and at first, did not keep pace with some of the latter imported kinds. The grass instead of being cut, was suffered to grow among the bushes. I was struck with the luxuriant manner they grew from the wet and dew thus afforded. While the grape and cherry were rapidly decay-

ing, the berries of the gooseberry were entirely free of decay, being clear and bright skinned. Those in dry grounds were much diseased and the bushes had become a nuisance.

I have already adverted to the peculiarity of the blossoms of the currant resisting heavy rains. The gooseberry blossoms are similarly constituted, and entirely different from the flowers of the grape, the apple, the peach, and the plum. I have thought that grass may be further serviceable, to the gooseberry, by abstracting from the soil those substances which foster the growth of minute fungi. This, however, is offered rather as a matter of conjecture, than from actual proof, and requires further investigation to determine.

I do not expect that the plan recommended, will be perfectly successful the first year after the removal of the gooseberry shrubs among grass or when sodded, though I do in the second season. The forming buds are injured, and the bark diseased by exposure to hot weather during the months of August and September, when they are not protected by grass and sufficiently supplied by dew and moisture. The gooseberry is a dew-loving plant, and must be supplied with moisture, otherwise it cannot flourish here as in Europe.

Cause of 'Gapes' in Chickens, and the Remedy.

Mr. Bateham:—So far as my observation or experience is concerned, in the raising of poultry, I know of but one cause of gapes in chickens—and the remedy that I am about to propose I have practised for fifteen years with unerring success. The means by which I ascertained the cause of the malady was by making a post-mortem examination of a chicken—the breathing organs of which I supposed were obstructed by some substance. Having severed the head I immediately extracted from the windpipe *four small angle worms*, (or earth worms,) about an inch and a quarter in length. They were partially decayed or broken, and thus clogged the passage of air through the windpipe. Soon after this, I made another examination upon a chicken, and found *nine worms* of the same species.

Now, the question is, how do these worms get into the windpipe of the chicken? I answer, the hen finds them for her young by scratching, the chickens swallow them alive, and during the night, while the chicken is inactive, small, and its digestive organs weak, these worms crawl up the throat, and finding no way to escape by the beak, pass down into the windpipe.

Mode of Prevention.—As soon as the chickens are hatched, coop up the hen and her brood, with boards at the bottom of the coop, for three or four weeks, by which time the digestive organs of the chickens will become strong enough to prevent any injury by eating worms.

The best *remedy* where the disease has accrued, is perhaps the one described in Ohio Cultivator, p. 174, vol. 2.

Respectfully yours, &c.,
H. MILLER.

Ashland, Ohio, 1848.

Remarks.—There is plausibility in the above theory respecting the cause of gapes, and it is certainly new to us; but we think friend Miller is mistaken in regard to the *kind of worms* found in the chickens. We think they are not ground worms, but something bred in the throat of the chicken, as before described in our columns, and in books, &c. Still we may be mistaken on this point, and invite our readers to make further observations, and report to us.—Ed.

Burr's Strawberries.

Mr. Burr's fine varieties of Strawberries have fully maintained their character the present season wherever compared with other varieties. Owing to the character of the season no kinds have done as well in this region as last year; but Mr. Burr's with the same soil and culture have we believe proved superior to all others in productiveness, and especially in flavor. The time for planting is near at hand, and we therefore refer our readers to Mr. Burr's advertisement. The following is from the Genesee Farmer of the present month:

Burr's new pine Strawberry.

Mr. John Burr, of Columbus, Ohio, a few years ago originated from seed some six or eight varieties of Strawberries, all of which had peculiar merits and were very favorably noticed by Committees of Horticultural Societies, as well as by individuals. Amongst all of these the *New Pine*, the subject of this notice was generally and unanimously conceded to be the best.

When at Columbus, last season we heard much said in commendation of Mr. Burr's Strawberries, and particularly of this New Pine, so that our expectations regarding it were raised pretty high. Now we are happy to state, that, so far it has sustained its Ohio reputation well. M. G. Warner, Esq., of this city, who was more fortunate than many of his neighbors, in saving the plants sent out by Mr. Burr last autumn, has exhibited fine specimens at our Horticultural Exhibitions, and we have examined the plants in his garden, loaded with fruit, and we have no hesitation in saying that it is really a valuable acquisition.

The plant is very hardy, having passed through the last severe winter without sustaining the least injury—grows very vigorously, has large handsome foliage, and is a great bearer, producing great bunches of perfect, uniform fruit. Fruit large—not so large as the largest of Hovey's Seedling, but more uniform in size, and regular in form; of a pale red color and high aromatic flavor, of unsurpassed richness; flowers pistillate: produced, we believe from seed of Hovey's Seedling, fertilized by a staminate seedling of Mr. Burr's known as Burr's Seedling.

As far as it is proper for us to judge of this strawberry, at this time, we think, all things considered, that it has no superior; and those who plant it in well prepared soil cannot fail to reap a rich and abundant crop.

OHIO CULTIVATOR.

COLUMBUS, OHIO, JULY 15, 1848.

Deferred—Notices of publications, and answers to several letters of inquiry are omitted for want of room.

Seed Wheat.—Owing to the rainey weather no wheat has yet been thrashed, and we are unable to state the quality or price of kinds wanted for seed.

The Weather for the past two weeks has been most extraordinary for the time of year, more or less rain having fallen in this region *for thirteen successive days!* So unfavorable a season for wheat harvest has not been known in these parts by "the oldest inhabitant." The wheat was mostly all cut when the rains commenced; and that which was well put up in shocks, we learn is not much if any injured; but a large portion was loosely put up and it is feared will be much damaged by sprouting. The past two days have been more favorable weather and afford hopes of a chance to harvest and thrash the wheat.

As far as we have learned the rains have extended nearly all over the state; it is probable however that owing to the later period of ripening at the north the damage to wheat will be less there than here.

Haymaking has also been much interrupted by the rains, and a good deal of hay destroyed.

Corn generally looks well, excepting some fields are blown down by winds.

Potatoes continue to look healthy—though fears are entertained that the wet weather will produce rot.

Take a little more time to rest at midday, when the heat of the sun is most oppressive.

Improved Hydraulic Ram.

This useful machine will soon be in quite common use throughout Ohio. (See advertisement.)

The following letter, published in the eastern papers, is from Professor Morse, the inventor of the Electro-Magnetic Telegraph:

Poughkeepsie, N. Y., May 2, 1848.

Gentlemen:—I have had in use, for many months, one of your Hydraulic Rams. I introduced it here last autumn, and have had hundreds of visitors who admired its operation! I consider the Hydraulic Ram as one of the most useful inventions I have known! I would not on any account part with mine, so indispensible do I consider it. I have all the advantages that New York derives from its invaluable Croton.

Very respectfully, your obedient servant,
Samuel F. B. Morse.

The following is quite to the point:

I have used the Improved Hydraulic Ram ever since the first of November, 1847, and cheerfully recommend the same to all who may wish to be supplied with running water, in a constant and durable manner. It exceeds any thing I ever saw or heard of, both for utility and durability. The distance from the spring to the house is 116 rods. The water is forced up an elevation of 212 feet. The fall from the spring to the Ram is 13 feet 4 inches. About two-thirds of the distance from the spring to the House, I take out sufficient water to supply 200 head of cattle, and have a full supply at my house. I would not be deprived of it for $1. 0 per year.

David C. Buel.

Sherburne (West Hill,)
Chenango co., N. Y., April 14. 1848.

Notes of our Trip North.

In our tour throughout a portion of the northern and eastern counties of this State, during the past month, we were under the necessity of traveling with as much expedition as could be done with one good horse; consequently we had to forego the pleasure of calling on a large number of our friendly subscribers whose farms or residences we passed. We deeply regretted this necessity, and we know some of our friends do the same, but when it is borne in mind that we could not be absent from home more than two weeks, without serious detriment to our business, we trust none will feel inclined to think that we intentionally slighted them.

Our notes will not give any connected narative of the journey, or the appearance of matters and things seen along the way, but simply a glance at a few objects observed, or facts learned during the trip; reserving some topics for discussion hereafter, when occasion may require.

In Delaware, Morrow and Richland counties, we tho't we could discover some evidences of improvement since last year. Certain it is, the crops looked better than we had ever before seen them in those parts; but this, doubtless, is mainly to be attributed to the favorable season.—Then, too, we think there are signs of improvement in the buildings, fences, gardens, orchards, &c., which cannot be mistaken; though it is true that these cheering signs are only witnessed occasionally along the road; say on about one farm in ten, or perhaps about the proportion of farmers that read agricultural papers. In the town of Delaware and its vicinity, we noticed that considerable increase of horticultural taste is manifested.—The citizens of the town are more generally embellishing their grounds and supplying their gardens and tables with choice fruits, flowers, &c., and many of the farmers are doing the same; some are beginning to discover that the hilly portions of Delaware and Morrow are admirably adapted for fruit, especially for apples; and a good orchard can be made more profitable than almost any other source of income not requiring more labor and expense. Still it is surprising to witness so large a number of farms not only destitute of an orchard, but with scarce a sign of a fruit tree, or even a currant bush upon them!

In Ashland and Lorain we thought we discovered more frequent signs of progress than on this side. The wheat fields of Ashland county presented a most beautiful spectacle; nearly all good, some remarkably fine, others giving evidence of bad culture or imperfect drainage; though as a whole, bespeaking good wheat farming. That part of Ashland once southern Lorain, is not well adapted for wheat, nor indeed for any thing else without better management than it generally receives; still it presents some good specimens of grass farms, and we believe several dairies—enough to show that with proper skill and energy, that level clayey region may become highly productive and profitable. But we remember we once lost two or three subscribers by speaking unfavorably of southern Lorain, and perhaps our readers in that region are no less sensitive now. In the matter of dwelling houses, we notice considerable improvement among farmers in Lorain county. The number of tasteful cottages and other farm houses recently erected, is larger than we have noticed in any other county. In the modes of farming, too, we think the crops, especially of wheat, give evidence of improvement. Much wheat is not sown in that portion of Lorain passed over in going from Ashland to Elyria, but what there is this year, is far better generally than we have ever before seen it. This is particularly true of some fields in the neighborhood of Oberlin; and on inquiry we learned that this improvement, like many others in that neighborhood, might be traced to the influence of the Oberlin Agricultural Association, and the general diffusion of agricultural papers among farmers there.—These influences have led to a more thorough system of tillage, deeper plowing for wheat, the use of clover, &c.; just the means which we have ever urged the farmers of

that and similar regions to adopt, but which so few are willing to put in practice.

The Lorain county Agricultural Society, we learn, is sustained with a good degree of spirit, and it is believed a very good exhibition will be had this year at Elyria.

In Cuyahoga county we only passed through by the ridge road, and hence did not see much of the best farming land or crops. That portion over which we passed, is mostly sandy and seems particularly adapted for fruit culture. It also produces good corn, potatoes, &c., where well cultivated. The fruit crop throughout the lake country is quite abundant; and all other crops look well.

At Dr. Kirtland's we were fortunate in finding strawberries and cherries just in their prime. The Doctor was not at home, but the assistance of Mrs. K. with the strawberries, and Mr. Elliott, (the next day) with the cherries, did much to make up for the absence of the worthy proprietor. We were particularly interested in observing the quality of the fine new cherries raised from seed by Dr. K., and introduced to public notice by Mr. Elliott the past year, (see descriptions in O. Cultivator, Horticulturist, and Report of Fruit Convention.) Only three or four of these were in perfect eating condition; the quality of these and the appearance of others satisfied us that these new cherries have not been overrated by Mr. Elliott, and that they will prove valuable acquisitions to our fruit gardens. We trust Mr. Elliott will publish a notice of his observations on these fruits the present season, so we omit comments at this time.

Elliott & Co.'s Nursery, we found in a neat and flourishing condition, (not excepting the department of Mrs. E.) The sales of trees, &c., from this establishment the past spring, Mr. E. informed us, were quite large and satisfactory. He is selling off the nursery stock of Dr. Kirtland in connection with his own; and has the best of facilities for selecting scions of the choicest varieties of fruit, and his knowledge of the different kinds will tend to prevent those annoying mistakes which frequently occur even among careful and honorable nurserymen.

The Cleveland Horticultural Society continues to maintain and promote an interest in the cultivation of choice fruit, flowers, &c., as is evident from the reports of its meetings and exhibitions, and from the continued increase of fine gardens and orchards in the vicinity of that beautiful city. The ravages of the rose bug and the curculio are worse around Cleveland than we ever saw elsewhere, and some fruit cultivators are much discouraged thereby. See remarks on this subject in another part of this paper

McIntosh & Co.'s Nursery continues to increase in the number and variety of its productions and the extent of ground covered thereby, while the disappearance of many squares containing thousands of fine trees each season, is evidence of the very extensive sales that are made annually. Indeed we see no indications of there being an overstock of any kinds of good fruit trees in the nurseries, notwithstanding the greatly increased production.

Mr. Wm. Case has a large and beautiful farm a little east of Cleveland, which he is improving and planting mostly with fruit trees, chiefly peach and apple. We did not find Mr. C. or any person on the premises to inform us of the extent of his plan, but we judge from appearances that he designs planting over one hundred acres with fruit.

Messrs. Houghton & Morse, our readers are aware, have also a very large fruit orchard, or farm, about four miles east of Cleveland, near the lake shore. The location is well selected for the purpose, being well sheltered by woods, &c., and the soil quite favorable. The trees consist mostly of peach and apple—with a good proportion of cherry, pear, quince, &c. All are growing finely, and some beginning to show fruit. We fear our rail road from Columbus to Cleveland will not be completed so soon as these gentlemen will be prepared to supply our market with peaches when the crop fails this way.

The road from Cleveland to Painesville passes through a well cultivated and beautiful portion of country. A succession of pleasant villages, as Euclid, Willoughby and Mentor, with substantial and tasteful dwellings, fine orchards and gardens, and the roads lined with spreading shade trees, give an air of comfort and refinement, that is pleasant to behold; while the broad meadows and fields of grain, herds of cattle, flocks of sheep, and capacious barns almost everywhere visible, are evidences of substantial wealth and prosperty among the farmers.

In Ashtabula, the most distant county from Columbus of any in the State, we found our lost "better half," quietly rusticating in the country at the house of her sister and mother. After one days rest and a few visits among friends, we set out for home, by way of Trumbull and Columbiana.

In Geauga and Ashtabula counties the wheat crop has suffered so much by the fly for the past two or three years that but very little is now sown—not enough we believe to supply the people with bread. What fields we saw this year, are not of very good quality, though we should think the defect was more generally owing to soil and culture than to the fly. We believe that the proper use of lime, ashes or plaster, with clover and deep plowing, would secure good crops of wheat on a majority of the farms in those counties. The grand difficulty here, as elsewhere, is, the farmers do not read and study enough to make themselves acquainted with the principles of agricultural science. Their grass lands, too, in most cases, do not produce more than about one half what they might be made to do, if a little *science* and *mind* was bestowed upon their management.

Crop of Artichokes.—Mr. Geo. W. Shepherd, a farmer near Unionville, in Ashtabula county, has the best field of Jerusalem Artichokes we have seen in the State, excepting that of Mr. Thomas Noble, of Stark county, referred to in our former volumes. Mr. S. devotes his entirely to the hogs, letting them do their own digging in the fall and spring, whereby the ground is sufficiently stirred to require no other cultivation, and enough roots remain to thoroughly stock it with plants for a new crop each year, without any further trouble than to shut off the swine as soon as the roots begin to sprout up in spring. We are surprised that this crop is not more common in this country, where farmers are so anxious to avoid labor. Another improvement worthy of notice on Mr. Shepherd's farm, is a drain by which several acres of valuable land is reclaimed, and a perpetual stream of good water obtained for stock. He also proposes to plant an Osage Orange hedge along the public road, the whole width of his farm.

Cheese Dairies have greatly increased in numbers and extent in the eastern counties of the Reserve during the past few years, and now constitute the principal branch of production for export in that region. Most of these dairies are only of moderate extent, consisting of from 30 to 50 cows, and managed by the members of a family with but little hired help. This is especially the case in Geauga and Ashtabula, and we believe in most of Portage. Though there are a few dairies of larger extent in each of these counties; and in some parts of Trumbull we learned there are dairies of more than 200 to 300 cows, and embracing every convenience and improvement that modern ingenuity has devised. The cows used for the dairies, as well as the cattle generally on the Reserve, average of smaller size than in the southern parts of the State; are more inclined to red color, showing a predominance of *Devon breed*, rather than the *Durham*, which is more prevalent in regions where *beef* stock is in demand.

We had no opportunity of visiting any of the large class of dairies, or one of a model character, but from what we saw of the common class, we think there is much room for improvement in the art of cheese making among the farmers of the Reserve, before the average quality of "W. R." cheese will be able to compete in price with the "Hamburgh" or "Herkimer" cheese of New York. And the difficulty is not in the soil or climate, but in the lack of knowledge and of the suitable buildings and conveniences among the majority of our dairy farmers. But we have repeatedly expressed our views on this subject, and it is little use saying more, especially while so few of those who need instruction are readers of this or any similar paper. We therefore drop the subject, with the hope that officers of agricultural societies and friends of improvement on the Reserve will consider the matter, and adopt some measures to secure the instruction and improvement of this class of farmers; for until this is done, we shall assuredly find Ohio cheese and Ohio butter occupying a low place in the market quotations of our eastern cities and Europe.

Wool Growing does not seem to be on the increase on the Reserve; and we did not find as many flocks of fine sheep there as we had expected. At Warren, Trumbull county, we saw a good flock, recently commenced, belonging to Hon. F. Kinsman, who informed us that he designs increasing their number as fast as he can do so with really fine sheep, and he has already the materials for making a superb flock. In company with Judge K. we visited the farm of Mr. C. Bidwell, a little south of Warren, where we found a flock embracing some of the finest and best sheep we have seen in this State or elsewhere. Mr. Bidwell has spared no pains or expense in procuring the best breeds of sheep anywhere to be had; and for this purpose he has traveled extensively through the best wool growing regions of Ohio, Pennsylvania, New York and New England, attending Fairs, visiting manufacturers, wool depots, &c., and purchasing the best animals he could find for sale, without much regard to price. He has several bucks, a year old, descended from the splendid buck imported two years ago, and purchased by Col. Lee, of Pensylvania, for $350—believed to be the best buck ever imported to this country. He has also bucks and ewes from several other recent and highly approved flocks at the east. We saw Mr. B.'s clip of wool of the present season, and can safely say we have never seen it excelled. To those who wish to improve their flocks of sheep in that part of the State, we say, pay a visit to Mr. Bidwell—he sells fine lambs and yearlings at reasonable prices, and is every way such a man as one can safely and pleasantly deal with.

The Trumbull County Agricultural Society is one of the most spirited and useful associations of the kind in the State, and with the aid of such men as the Kinsmans, the Perkin's, Hapgood, Hezlep, Bidwell, Beaver, and the like, to give it character and efficiency, we shall be much surprised if it does not long continue to exert a most beneficial influence on the agriculture and prosperity of the county. We deeply regretted that our time would not permit us to pay a visit to some of the northern and eastern townships of Trumbull county, where we know from the number of our subscribers in those parts, we should have found better farms and farmers than in the rest of the county generally; and better than in almost any other portion of the Reserve. We shall hope to see them at some time hereafter.

At Canfield, (Mahoning county,) while enjoying the hospitality of Judge Newton, the President of the County Agricultural Society, we took a short stroll to look at some noble cattle, and a couple of fine fields of timothy grass that had arrested our attention from the road before we knew who was their owner. This grass was not yet fully grown, and we judged it would cut not less than three tons of hay to the acre—this too in a season not counted very favorable for grass, the farmers thro'out the Reserve generally having a rather light crop, owing to dry weather in April. Our first inquiry was to learn the secret of this heavy growth, and it gave us pleasure to learn that Judge Newton's mode of managing meadows, and other departments of farming, were based on principles of true science, and were learned by reading agricultural books and papers. In other words, Judge N. is what many sneeringly term a "book farmer"—and well would it be for Ohio if there were thousands more of that class within her borders. We shall not attempt in this place to give a detailed account of Judge Newton's system of managing grass lands, but will do so at another time. Some of his views on this subject are embodied in an address delivered by him to the county Ag. Society, which is shortly to be published. We may give our readers a portion or all of it when it comes to hand.

Mr. H. J. Canfield, one of our correspondents, lives opposite to Judge Newton. He has a small farm with a good apple orchard, and a healthy flock of sheep, not very fine but of good fair quality. Mr. C. has devoted much attention to the subject of sheep, their breeds and management, diseases, &c.; and he has now in press a volume of about 400 pages, devoted to this subject. He claims to have made some valuable discoveries in regard to the

means of preventing the rot and other diseases in sheep, that from the testimony shown us we think will make his book valuable. He handed to us some proof sheets of the work, but being only the historical and descriptive portions, we cannot speak of the practical character of the volume. It is illustrated with good engravings. We shall notice the work as soon as issued.

[*Further notes in our next.*]

The "Rose Bug,"

Its Natural History and Transformations.

For two or three years past the ravages of the *Rose Bug* have increased to an alarming extent throughout a large portion of Ohio. In our late tour through the northern and eastern counties, we were surprised at the extent of the mischief these insects had committed. In the vicinity of Cleveland we noticed more of it than elsewhere; though in all parts of the country, where the soil is *sandy* we saw marks of devastation on the leaves of fruit trees, and even some kinds of forest trees, as the chestnut and black cherry. In the nurseries of Dr. Kirtland, Messrs. Elliott & Co., and McIntosh & Co., they had done great mischief to the cherry trees, grape vines, &c., notwithstanding great pains had been taken to gather and destroy the insects daily. Our friend Dr Ackley who has a fine collection of bearing fruit trees, we found quite discouraged. The curculio had destroyed his plums and apricots, and the rose bug his cherries and grapes, and "finally" said he "they have taken to the *young fruit* on my peaches and will soon destroy it all."

The sight was indeed most melancholly and well calculated to discourage fruit growers; but we would advise them to "hope on" and persevere in their efforts to overcome or at least keep in check the enemy. There is some ground for the hope that the Rose Bug may prove only a transient resident of Ohio. Like some others of the insect tribe it may disappear from our gardens in a year or two. We are informed that in some parts of New England where it appeared in devastating numbers some years ago—very little if any thing has been seen of it for some years past.

As some of our friends have desired us to give information respecting the habits and transformation of the insect, we copy the following article from the treatise of Dr. Harris:

The rose-chafer, or rose-bug, as it is more commonly and incorrectly called, is also a diurnal insect. It is the *Melolontha subspinosa* of Fabricius, by whom it was first described, and belongs to the modern genus *Macrodactylus* of Latreille. Common as this insect is in the vicinity of Boston, it is, or was a few years ago, unknown in the northern and western parts of Massachusetts, in New Hampshire, and in Maine. It may, therefore, be well to give a brief description of it. This beetle measures seven twentieths of an inch in length. Its body is slender, tapers before and behind, and is entirely covered with very short and close ashen-yellow down; the thorax is long and narrow, angularly widened in the middle of each side, which suggested the name *subspinosa*, or somewhat spined; the legs are slender, and of a pale red color; the joints of the feet are tipped with black, and are very long, which caused Latreille to call the genus *Macrodactylus*, that is long toe, or long foot. The natural history of the rose-chafer, one of the greatest scourges with which our gardens and nurseries have been afflicted, was for a long time involved in mystery, but is at last fully cleared up. The prevalence of this insect on the rose, and its annual appearance coinciding with the blossoming of that flower, have gained for it the popular name by which it is here known. For some time after they were first noticed, rose-bugs appeared to be confined to their favorite, the blossoms of the rose; but within thirty years they have prodigiously increased in number, have attacked at random various kinds of plants in swarms, and have become notorious for their extensive and deplorable ravages. The grape-vine in particular, the cherry, plum, and apple trees, have annually suffered by their depredations; many other fruit-trees and shrubs, garden vegetables and corn, and even the trees of the forest and the grass of the fields, have been laid under contribution by these indiscriminate feeders, by whom leaves, flowers, and fruits are alike consumed. The unexpected arrival of these insects in swarms, at their first coming, and their sudden disappearance, at the close of their career, are remarkable facts in their history. They come forth from the ground during the second week in June, or about the time of the blossoming of the damask rose, and remain from thirty to forty days. At the end of this period the males become exhausted fall to the ground, and perish, while the females enter the earth, lay their eggs, return to the surface, and, after lingering a few days, die also. The eggs, laid by each female are about thirty in number, and are deposited from one to four inches beneath the surface of the soil; they are nearly globular, whitish, and about the thirtieth of an inch in diameter, and are hatched twenty days after they are laid. The young larvæ begin to feed on such tender roots as are within their reach. Like other grubs of the Scarabæians, when not eating, they lie upon the side, with the body curved so that the head and tail are nearly in contact; they move with difficulty on a evel surface, and are continually falling over on one side, or the other. They attain their full size in the autumn being then nearly three quarters of an inch long, and about an eighth of an inch in diameter. They are of a yellowish white color, with a tinge of blue towards the hinder extremity, which is thick and obtuse or rounded; a few short hairs are scattered on the surface of the body; there are six short legs, namely a pair to each of the first three rings behind the head; and the latter is covered with a horny shell of a pale rust color. In October they decend below the reach of frost, and pass the winter in a torpid state. In the spring they approach towards the surface, and each one forms for itself a little cell of an oval shape, by turning round a great many times, so as to compress the earth and render the inside of the cavity hard and smooth. Within this cell the grub is transformed to a pupa, during the month of May, by casting off its skin, which is pushed downwards in folds from the head to the tail. The pupa has somewhat the form of the perfected beetle; but it is of a yellowish white color, and its short stump-like wings, its antennæ, and its legs are folded upon the breast, and its whole body is enclosed in a thin film, that wraps each part separately. During the month of June this filmy skin is rent, the included beetle withdraws from it its body and its limbs, bursts open its earthen cell, and digs its way to the surface of the ground. Thus the various changes, from the egg to the full developement of the perfect beetle, are completed within the space of one year.

Such being the metamorphoses and habits of these insects, it is evident we cannot attack them in the egg, the grub, or the pupa state; the enemy, in these stages is beyond our reach, and is subject to the control only of the natural but unknown means appointed by the Author of Nature to keep the insect tribes in check. When they have issued from their subterranean retreats, and have congregated upon our vines, trees, and other vegetable productions, in the complete enjoyment of their propensities, we must unite our efforts to seize and crush the invaders. They must indeed be crushed, scalded, or burned, to deprive them of life, for they are not affected by any of the applications usually found destructive to other insects. Experience has proved the utility of gathering them by hand, or of shaking them or brushing them from the plants into tin vessels containing a little water. They should be collected daily during the period of their visitation, and should be committed to the flames, or killed by scalding water. The late John Lowell, Esq. states, that in 1823, he discovered, on a solitary apple-tree the rose-bugs "in vast numbers, such as could not be described, and would not be believed if they were described, or, at least, none but an ocular witness could conceive of their numbers. Destruction by hand was out of the question", in this case. He put sheets under the tree, and shook them down, and burned them. Dr. Green, of Mansfield, whose investigations have thrown much light on the history of this insect, proposes protecting plants with millinet, and says that in this way only did he succeed in securing his grape-vines from depredation. His remarks olso show the utility of gathering them. "Eighty-six of these spoilers", says he, "were known to infest a single rose-bud, and were crushed with one grasp of the hand." Suppose, as was probably the case, that one half of them were females; by this destruction, eight hundred eggs, at least, were prevented from becoming matured. During the time of their prevalence, rose-bugs are sometimes found in immense numbers on the flowers of the common white-weed, or ox-eye daisy, (*Chrysanthemum leucanthemum*), a worthless plant, which has come to us from Europe, and has been suffered to overrun our pastures, and encroach on our mowing lands. In certain cases it may become expedient rapidly to mow down the infested white-weed in dry pastures, and consume it, with the sluggish rose-bugs, on the spot.

Our insect-eating birds undoubtedly devour many of these insects, and deserve to be cherished and protected for their services. Rose-bugs are also eaten greedily by domesticated fowls; and when they become exhausted and fall on the ground, or when they are about to lay their eggs, they are destroyed by moles, insects, and other animals, which lie in wait to seize them. Dr. Green informs us, that a species of dragon-fly, or devil's needle devours them.

To Boil Rice.—There are some housewives who seem to prefer rice boiled into a starchy appearance. It does not seem to eat so well, or to look so well, as when boiled so that each grain stands swollen out and plump, as if asking—eat me. Those who prefer it thus, will put the rice into an open vessel, with enough water to cover it; boil until soft, then pour off the water and cover the vessel, a stew pan well tinned, and place on coals to stew for 15 minutes. Some folks wash rice—do you?—*Ex.*

Seed Corn---Salt Petre and Squirrels.

Mr. Bateham:—Having a piece of new ground to plant with corn this season, and feeling a *leetle* afraid of them are varmints called chipmucks, or ground squirrels, (as there was a strip of woods on two sides of the field,) I thought I would try some of the expedients which have been recommended in the papers, for the protection of corn from squirrels, birds, &c.

In the first place, I soaked my seed corn in a steep of saltpetre; I put about about one pound to a bushel of corn, soaked about 24 to 30 hours; then, to make the matter doubly sure, I took the corn and mixed spirits of turpentine well through it, which gave it so strong an odor that one of my hands who dropped the corn being rather timmid, went and got some strips of hickory bark and tied over his wristbands to prevent the dangerous stuff from running up his arms, as he said. Well sir, we planted the corn well, and in good season, and as it was at some distance from my house, I did not go to look at it again until I supposed it to be about large enough to plow amongst. When I took a stroll up that way, and before I came to the corn, I was saluted by the chipperings of the squirrels, who, as I naturally supposed, were tantalizing me for spoiling all the corn so that they could not eat one grain of it; and sure enough, when I came into the field among the corn, I found about one hill in 35 that they had dug into and took about half out, and the balance was—all gone entirely; scarce a whole hill was left in the field; and the squirrels were peeping out at me in all directions, saying, "you seasoned that first rate; hope you will fix some more so;" and thus my trouble to prepare my seed by steeps, &c., only seemed to give it a greater relish for the squirrels. Can you give me any new method of preparing seed to save it from the ravages of these pestiferous critters.

Is there no prospect of a tariff, or tax, or any thing of that sort to protect sheep from the dogs. I had a flock of twenty-six choice sheep, and the dogs have left me but three of them, which I would like to have protected in some way, provided an amicable arrangement could be effected with dogs, sheep and owners. Yours,

Phœnix.

Newport, Washington Co., O., June, 1848.

Remarks.—We have recommended soaking seed corn in a solution of salt petre as a protection against grub worms, and we have abundance of testimony to prove its efficacy. For birds and squirrels our recommendation (vol. 2 p. 63,) is tar water and plaster. We believe one of our correspondents, Gen. T. Worthington has stated that he saves his corn from birds and squirrels by soaking in salt petre or whiskey. Perhaps he uses a stronger solution of nitre, or his squirrels are of a different breed.—

Water as a Beverage.

Water is the natural and proper drink of man. Indeed it is the grand beverage of organized nature. It enters largely into the composition of the blood and juices of animals and plants; forms an important ingredient in their organized structures, and bears a fixed and unalterable relation to their whole vital economy. It was the only beverage of the human family in their primeval state.

In that garden, where grew "every tree pleasant to the sight and good for food," producing all the richness and variety of "fruit and flower" which an omnipotent and all-bountiful Creator could adapt to the relish of his senses, and the exigencies of his entire organization; it cannot for a moment be doubted that man was in a condition the best suited to secure to him the uninterrupted, as well as the highest and best exercise and enjoyment, of his physical, mental, and moral powers. His drink was water. A river flowed from Paradise. From the moment that river began to "water the garden," till the present, no human invention has equalled this simple beverage; and all the attempts to improve it by the admixture of other substances, whether alcoholic, narcotic, or aromatic, have not only failed, but have served to deteriorate or poison it, and render it less healthful and safe.

Water is as well adapted to man's natural appetite as to the physical wants of his organs. A natural thirst, and the pleasures derived from its gratification, were given us to secure to the vital machinery the supply of liquid necessary to its healthy movements. When this natural thirst occurs, no drink tastes so good, and in truth none is so good as water; none possesses adaptations so exact to the vital necessities of the organs. So long as a fresh supply of liquid is not needed, so long as there is not the least relish for water; it offers no temptation, while its addition to the circulating fluids would be useless, or hurtful.—*Dr. Muzzey's Prize Essay.*

"Talk about getting a good deal out of a little piece of land!" exclaimed Simpson, "why I bought an acre of old Mr. Ross, up at Goose Fair, and planted one acre of it with potatoes, and t'other with corn—"

"I thought you said you bought only one acre, Simpson!" remarked a listner, "how could you plant two?"

"Very easily sir—I stood it up on the end, and planted both sides of it."

HOUSEWIFE'S DEPARTMENT.

CONDUCTED BY MRS BATEHAM.

At Home Again.

Once again, Friendly Readers! after long absence from town, we find ourself at our post, and with pen in hand ready to hold a familiar chat with you. We unexpectedly failed to return in time to prepare for the last number, which, in consequence come to you minus the Housewife's Department. In the end, however, we believe you will have no cause to regret.

The three months last past have afforded us more genuine and needful knowledge, than was probably obtained in any previous six months, when as yet we knew not to what definite end our knowledge was to be applied.

We have become acquainted with WOMAN in nearly all the relations which she sustains in our state: from the wife or daughter of the coal digger or laborious farmer or mechanic, to those of the man of wealth and ease; and we have endeavored too, to look upon them with our natural eyes unshaded, and the eye of our mind undimmed by prejudices or in danger of being dazzled by splendor, or repulsed by poverty or degradation.

We feel that we understand better than ever before, the condition and wants of our sex; can sympathise more deeply with the embarrassments under which they live, and can rejoice more heartily in the abundance of good which our Heavenly Father is continually showering down upon us all.

We have returned, too, more deeply in love with our own state and its inhabitants. He that breathes her free air, tills her free soil, and helps to sustain her noble institutions may hold up his head with honest pride when he hears her name mentioned with those of her sister states. There may be found more luscious fruits than are grown upon her lake border, more luxuriant meadows, and larger, and better kept dairies than are found in Trumbull and Ashtabula, a finer wheat region than Stark and Tuscarawas, more magnificent corn plantations than the Scioto valley presents, lovlier and more fertile valleys than the Tuscarawas and Muskingum, a more beautiful city than Cleveland or sweeter villages than Norwalk and Granville; but until we have seen them we shall not pledge our credulity.

Our trip North was through Mt. Vernon, Wooster, Akron and Cuyahoga Falls to Cleveland, thence along the lake shore to Ashtabula Co. It was made quite early in the season, before nature had assumed much of her summer loveliness; but even at this time a joyful heart could find no lack of entertainment. Those charming little lakes which meet one so frequently on this route cannot fail to interest at all seasons. Most of them appear in all their native beauty, while others have been despoiled of every tree and bush. But we would not seem too severe in our frequent criticism upon this practice. When the pioneer shoulders his axe and penetrates the forest, he regards the trees as his natural enemies, and against them he is to wage a war of extermination; and he thinks only of this, and not upon the future appearance of his vanquished domain.

We were greatly surprised at the appearance of some of the houses and inhabitants situated upon the very banks of these beautiful waters. A miserable old log house with rags stuffed in at the broken windows, a rail fence in front, with no gate, the road occupied by wagons, old sleds, pig pens, wood pile, &c.; and even with such a fountain for cleanliness right in their very yards, the smaller fry, and sometimes the larger too, presented any thing but clean faces or garments. We do not remember to have seen a single bathing house on the margins of these lakes and in but few instances any kind of a sailing craft, and but few shady paths along the banks.

Spent a day at Cuyahoga Falls most agreeably with a friend, but owing to the inclemency of the weather saw but little of the natural beauties of that truly romantic village. Saw in this place a good exemplification of the permanent advantages resulting to a town when its first settlers were men and women of talent, education, refinement, and sound integrity.

Passed several days in that city of hotels and trees—Cleveland. Could the rich soil of our portion of the state be added to her gardens and yards, and also to the farming region just around, with the advantages she now possesses, and the taste and enterprise of her citizens, what city in this, or in any other state would be able after a few years to compete with her? In common with all other lake and seaport towns, Cleveland loses much of its attraction by the continual desecration of the Sabbath, caused by the arrival and departure of steamboats, &c.

Most of the time of our absence was passed in Lake, Geauga, and Ashtabula counties—a part of the Reserve by no means unimportant.

We were much gratified with the spirit of improvement manifested, and particularly upon the subject of education. Almost every township has an academy, or supports a select school part of the year; and yet we would rather see a general elevation of the common schools, affording through them the means of a good education to all, while the few who desired it might patronize more liberally the Institutions of which the Reserve now has a sufficient number for its necessities, and those too, of a high order.

We were glad to learn of the popularity which the new Female Seminary at Willoughby has obtained, and that it promises fair to meet the expectations of its most sanguine friends. Our much loved *alma mater*, Oberlin, still continues to merit, and receive a good degree of patronage. We did not visit that Institution, but were pleased to learn that the number of students is greater even than usual and we suppose the female department is proportionally increased.

Every one, no doubt, is familiar with the term "Cheesdom" applied to the Reserve, and well do some counties merit the name. We think there were no less than twenty-five dairies within a circuit of five miles embracing the place where most of our time was passed. The number of cows in each varying from twenty-five to sixty or seventy.

It is not our purpose to write a dessertation upon cheese making, but to speak of it only as it affects our sex. In the very large dairies men perform most of the labor, but as a general rule cheese making and severe female labor are combined. Indeed the condition of woman in dairies is frequently little better than servitude; and in too many instances this is the lot of the mistress of the family.

All of our readers know very well that we are an advocate of female industry—but within certain limits; a universal division of labor, giving a moderate share to all, rather than overtaxing a part.

Milking is one of the severest tasks imposed. We do not by any means think a woman should never milk. Indeed "uncle Jonathan's" argument, based upon their superior *neatness* has great weight with us. But when young women are obliged for a whole season to milk eight or ten cows every morning and night, unless there are strong counteracting tendencies, it cannot be otherwise than detrimental to her, physically and mentally. We have not room to argue this point at length, nor do we need to. The mothers and daughters are already on our side, and we will trust the fathers and brothers to their influence.

We were met every where with instances in which female labor was painfully increased, and in many cases we believe doubled by the inconveniences under which it was accomplished. Thought, observation, and a willing mind are all that a man lacks in thousands of instances in order to diminish vastly this great evil. No one lacks some sort of facilities, and odd minutes enough to employ them. Some of the most prominent defects we observed were—want of cisterns, leaky roofs, broken windows, smoky chimneys, no wood houses, muddy door yards, careless habits, and a lack of a thousand-and-one household implements and conveniences too minute to mention, but very useful, and which a little labor and ingenuity might supply. The "good man" notices that his wife looks thin, dark, and wrinkled, goes bent over, inclines to be taciturn, and sometimes, we are sorry to say, fretful and impatient, but sagely concludes it is the "way of the world," rallies her upon growing old, and soon adopts the fashion of calling her old woman—a title not very flattering to female vanity.

But we will turn our thoughts into more agreeable channels, and censure no more this, time lest we offend and discourage, instead of doing good.

Our route home was somewhat circuitous, from Ashtabula south through Warren and Canfield to New Lisbon, thence through Zoar, Coshocton, Newark, &c., to Columbus. Our time and space are entirely too limited to give any thing more than a glance at this interesting and important section of our state, embracing as it does her finest grass and wheat regions, some of her highest hills, most beautiful valleys, loveliest streams, oldest settlements, and most distinguished citizens.

We made a brief but very agreeable visit at Zoar. This place possesses the deepest interest to the Philanthropist, the moral Philosopher, and indeed to all reflecting minds, as presenting a full illustration of the principle of a community of Interest, or in other words, of association, its influence upon man pecuniarily, physically, mentally, and morally. But a whole chapter would fail to furnish even a glance at the many objects of interest connected with these people. We will just speak of the condition of the females. In them we saw much to admire; their industry, neatness, taste about their houses, ingenuity, &c. &c., but we also were grieved to see that those of them who can be spared from indoor occupations go out day after day and perform men's labor in the field, entirely regardless of those habits of delicacy and refinement which we of this country consider so essential to the character of women. We would not object so strongly to this, did there seem any shadow of necessity for it, even such as existed at the commencement of their settlement. But while there are now but about two hundred men, women, and children in the association, and an intention on the part of the leaders to admit few, if any more, they continue to add thousands upon thousands of acres to their already abundant possessions. To cultivate this in the superior manner they do, requires an almost inconceivable amount of labor, and of course, so much of it as they can possibly perform, falls upon the people.

They are also kept as much as possible from contact with the world around, from learning our language and adopting our customs; consequently we found them still habited in spensers and short skirts, very coarse shoes, and those odious quilted calico caps.

We will touch upon one point more then close our rambling lengthy remarks.

We had the good fortune to become acquainted with several of the female pioneers of our country, particularly of Geauga, Trumbull, Mahoning, and Columbiana counties, and we only wish our readers, especially the young portion, could have drawn their chair to the side of these honored matrons and hung on their words with the pleasure and profit we did. Our aged friends will pardon us if we refer to them thus pointedly. We do it not to flatter you, or because we suppose that our poor attempt is needed to help sustain you in that exalted station in which your heroism, fortitude, worth, and many virtues long since placed you. But we regard the character of our worthy pioneers as a legacy which we may use even during the life time of the donors to teach us younger ones the lessons which we shall need to have learned when you have passed into your honored graves.

We shall never forget the venerable pair whose hospitality we enjoyed at New Lisbon. Almost half a century has passed since they penetrated the forests of Columbiana Co. They were married there, have from small beginings amassed a fortune, raised twelve sons and daughters who are all married, and all of whom occupy respectable, and several of them highly honorable and responsible stations in society, and yet the vivacity of youth seems scarcely lessened; altho', the body is old the heart is yet young. Other and similar instances we met with.

To speak of such women as possessing masculine minds is bestowing upon them rather a doubtful compliment. Let us claim for them the possession of *woman's* mind; as exemplifying what woman may do and become. Their circumstances were as unfavorable as we can conceive, and yet in spite of them they have come to occupy their present positions, in full keeping with the age in real education, dignity, refinement, piety and general intelligence.

Noble Dames! when the light shall have faded from

your eyes, and you enjoy your well earned rest, who of us shall be deemed worthy to receive your falling mantles, and merit the tribute of admiration and praise which are now so justly accorded to you.

Drying Cherries, Currants, &c.

Some dry cherries without stoning, and then no dried fruit is so meagre. The best way is to stone them, spread them on earthen plates, sprinkle on sugar in the proportion of one-fourth of a pound to a pound of the fruit, and set them in a warm oven. These stewed, adding a little more sugar if necessary, make sauce which, to us, is far more agreeable than preserves. Currants are best dried in the same manner.

A hint upon stewing dried fruits. They need to soak some time before reaching the boiling point.

☞One of our correspondents says to us, "advise your readers to dry a quantity of the morello cherries (now so plenty,) for winter's use. Stone them and dry them like other fruit; they will make good tarts and pies when fresh fruits cannot be had.

To Preserve Cherries.—Take large ripe morello cherries; weigh them, and to each pound allow a pound of loaf sugar. Stone the cherries, (opening them with a sharp quill,) and save the juice that comes from them in the process. As you stone them, throw them into a pan or tureen, and strew about half the sugar over them, and let them lie in it an hour or two after they are all stoned. Then put them into a preserving kettle, with the remainder of the sugar, and boil and skim them till the fruit is clear and syrup thick.—*Ex.*

Corn Beer.—'Tis good and harmless, withal cheap and easily made. Boil 3 pints of corn until the skin slips; take it out of the water, and put it into a four gallon jug or demijohn; cover the corn with water, thus to remain until fermentation has taken place, which is by bubbles rising, gas escaping; then add water, sweetened to the taste. As the beer is drank out of the vessel, add sweetened water every night. When the corn is first used, the drink will be sometimes thick and oily; throw this away and add more sweetened water. A few trials will give to any housekeeper the knowledge as to quantity of sugar, and a few days will give the quantity of sweetened water to add each night, after the last draught be taken. And how many gallons of beer will these three pints of corn make during the year? Multiply each day by full two gallons, and I guess you will come near it. The three pints will do for twelve months constant use.

Soft Ginger Bread, to eat with Corn Beer.—Take 4 tea cup fulls of flour, 2 of molasses, ½ do. of butter, 2 of buttermilk, 1 of thick cream, 3 eggs, 1 table spoonful of ginger, and the same of saleratus. Mix them all together, except the buttermilk and saleratus: the latter should be dissolved in the buttermilk and added to the residue. Instead of 2 cups of molasses, use one of sugar and one of molasses. Some prefer it. Bake soon after mixing, and eat warm or cold.—*Ex.*

English News of the latest dates shows no material change in prices of grain and flour, or American provisions. The weather and appearance of crops are quite favorable. Great excitement and disturbance prevail in France; and a large portion of the continent of Europe is still in a state of war.

The Markets.

Dullness continues to characterize the reports of the markets in all parts of the country. This is usual, to some extent, during midsummer; and it may be expected that, when fall operations commence, business will revive and prices improve.

Cincinnati, *July* 13.—Flour is firmer than a week ago; sales at $4,25@$4,30. Wheat 65 cts; Corn 28@30; Oats 27@30; Barley 30@35 cts per bush. Pork, mess, $8,25@$8,50 per bbl. Lard 7½@8 cts ℔ lb. Butter, for packers, 9@9½ cts; fresh rolls, at retail, 20@25 cts per lb. Cheese, for shipment, 6@6¼ cts. Eggs 6½@7 cts per doz. *Wool*, common, 16@18 cts, to 20@25, for fine grades. *Cattle*, sales at $3,50@4,50.

Chillicothe *July* 12.—Flour $4,25@4,50. Wheat 60@65. Corn 22@24. Oats 20. Flax seed 62.

Mansfield, *July* 11.—Wheat 80@85 cts. Flour $4@4,25. Corn 28@31 cts; Oats 18 cts; Flax seed 75 cts. *Wool* 18@25 cts.

New York, *July* 12.—Genesse and Ohio flour, $5,25@5,50 per bbl; prime wheat $1,20@1,25 per bush.; Corn 50@54 cts. Provisions steady at former prices.

Cleveland, *July* 11.—Flour —. Wheat 90 cts; Corn 33; Oats 22; Rye 45. Fine salt, $1,20@$1,25. White fish $4.

TURNIP SEEDS,

Of several kinds, both English and American, for sale by the pound, ounce, or small paper, at

BURR'S STORE.

Columbus, July 15.

GATCHEL'S IMPROVED HYDRAULIC RAMS.

From all that we have seen of the operation of different forms of the Hydraulic Rams, we have become convinced that the one known as *Gatchel's Patent* is the best; and having secured an agency from the patentee, we design to keep a supply of the different sizes on hand, together with suitable pipe, ready to put them in operation for any persons who may desire the benefits of this very useful invention.

The owners of the patent right for the southern half of Ohio, including the counties of Tuscarawas, Knox, Delaware, Logan, &c., are Geo. M. Lell, Moses Kelley and P. McKinstry, of Waynesville, Warren county, O. These gentlemen are now engaged in selling rights of counties, and putting up rams where it is convenient. They have sold at present, about twelve counties out of forty-six. We are authorized to sell and put up rams in any of the counties unsold; also, to dispose of rights for counties if such are desired.

The owner of the patent for northern Ohio is Ransom Bartle, of the State of New York, is now traveling in northern Ohio, selling rights and Rams. He has also authorized us to sell and put up the machines in his territory for any who may desire; or to sell rights of counties.

One of Gatchel's Improved Rams may be seen in operation, at any time, on application at Burr's Store, or at the office of this paper. Also, at the Mansion House in Circleville.

M. B. BATEHAM.

Columbus, O., July 15, 1848.

STRAWBERRY PLANTS.

Plants of the following choice varieties can now be furnished at the prices annexed:

Large Early Scarlet, Burr's (old) Seedling, Hovey's Seedling, and Hudson, 50 cents per dozen, $2 per hundred.

Swainstone's Seedling, Columbus, Rival, Hudson, and Profusion, 75 cents per dozen, $3 per hundred.

Scioto, Scarlet Melting, New Pine, and Ohio Mammoth, $1 per dozen; $5 per hundred.

Late Prolific, $3 per dozen.

The following varieties of some note have been received, and are under cultivation, but not yet sufficiently proven to test their merits:

Eberlein's Seedling, Taylor's Seedling, Jenny's Seedling, Willey, Neck'd Pine, Boston Pine, Black Prince, and some others.

The following eight kinds have been cultivated and rejected by me, as of little value compared with the first 13 varieties:

Bayne's Extra Early, Methven, Ross Phœnix, Bishop's Orange, Downton, Myatt's Eliza, Stoddard's Red and White Alpine.

I have no hesitation in placing six of my new varieties before all others that have been tried and proved here, for size, quality, great productiveness, vigorous and hardy character, they excel all others.

JOHN BURR.

Columbus, July 15, 1848.

SELLING OFF.

LINNÆAN BOTANIC GARDEN AND NURSERY.

Late of WILLIAM PRINCE, Deceased,

Flushing, Long Island, near New York.

WINTER & CO., Proprietors.

In consequence of the decease of the Junior, and of the advanced age of the surviving partner who therefore intends to relinquish the business, the entire stock of this establishment, comprising every description, including the newest and choicest varieties, of *Fruit* and *Ornamental Trees, Shrubs, Vines* and *Plants, Roses, Greenhouse Plants, Box Edging, etc.* will be disposed of in lots to suit purchasers, at very reduced prices, in order to close the business as speedily as possible.

Orders, accompanied with the Cash, to the amount of Ten Dollars or upwards, will be supplied at a reduction of 25 per cent. from the usual prices.

Nurserymen, Venders, and others, wishing to purchase by wholesale, will be supplied at such reduced prices according to quality and quantity, as will probably prove satisfactory to them. Young stock, both in the Fruit and Ornamental departments, supplied very low by the quantity.

An opportunity is afforded to Amateurs and Nurserymen to obtain extra sized and many new and rare Specimen Fruit and Ornamental Trees Shrubs and Plants, at very moderate prices.

Extra sized Ornamental and Shade Trees for Streets, Lawns and Parks, low.

The establishment, now in the highest order and densely stocked, will be disposed of upon liberal terms, offering from its location, celebrity, saleable greenhouses, dwellings, and other conveniences for conducting the business, very superior advantages to any person disposed to pursue it.

It is requested that letters of inquiry, &c., be post paid. Descriptive Catalogues gratis.

August 1, 1848.

SALE OF STOCK,

At the New York State Fair, at Buffalo.

I Will sell on the show days of 5th, 6th, and 7th of September next,

30 to 35 thorough bred short horned Cattle—Cows, Bulls, and Heifers,

20 to 25 Devon ditto,

25 to 30 Cotswold (long-wooled) Sheep—Rams and Ewes.

20 to 25 South-down ditto.

All of the above are descended from the best herds and flocks of England, with the best prodigrees. LEWIS F. ALLEN.

Black Rock, July 1st, 1848.

TO FARMERS.

HUSSEY'S REAPING MACHINE, OF BALTIMORE, MD.

The subscribers having purchased the exclusive right of the Patentee, to make and vend HUSSEY'S celebrated

Reaping Machine,

for this part of the State, take this method of informing the Farming Public, that they are now manufacturing said Machines, at their shop in the Basement story of the Urbana Factory, Champaign county, Ohio, where they invite all interested to call and examine them. The reputation of these excellent Machines is now established. Their usefulness has been tested in the vicinity; and reference for this fact may be made to Wm. S. Taylor and Rezin Wilson, of Buck Creek, and to Mr. Harris or Mr. Burnett, Clark county.

The demand for them will doubtless be large; and as the subscribers desire to supply it, they respectfully suggest to those wishing to procure them, that they call and leave their orders for Machines at as early a day as possible.

MINTURN & ALLEN.

PRINCE'S PREMIUM STRAWBERRIES.

Wm. R. PRINCE & Co., Proprietors of the Linnaen Botanic Garden and Nurseries, will after the 1st August, offer their splendid varieties of the Strawberry, which have just received all the premiums of the Long Island Horticultural Society, and will there be described in the Horticultural Periodicals; comprising the Charlotte, Primordian, Primate, Cornucopia, Crimson Cone, Crimson Pine, Brilliant, Let Baron, Montevides Pine, Cushing, Eaustatia, Unique, Refulgent, Prolific Hudson, Scarlet Cone, Lizzie, Randolph, Abyssinian, Prince, &c.—Also Burr's nine Ohio varieties, Hovey's Seedling, Boston Pine, Black Prince, Ebberlein, Buist's Prize, Aberdeen Scehive, Bishop's Seedling, Hudson, Jenney's Seedling, Iowa, Ladies Finger, Large Early Scarlet, Victoria, Prince Albert, Alice Maude, Taylor's Seedling, Necked Pine, Pistallate Keen, Willey, Green, Prolific Hautbois, and Red and White Bush and running Alpines.

Descriptive Catalogue with prices, will be sent to every post-paid applicant.

Flushing, July 1st, 1848.

Rogers' Patent Self-Sharpening Steel Cultivator Teeth.

Having Purchased of the Patentee the right of the State of Ohio, except the counties of Ashtabula and Trumbull, for the manufacture and sale of the above important farming implement, and having put in operation at Akron, Ohio, a complete set of machinery for their manufacture, we are now prepared to supply all demands for them on short notice.

These teeth are made of Steel Plate of such size and dimensions as to be sufficiently strong for two horses. They wear sharp, and when worn too short, may be spread and crooked at the bottom, and thus made to last another term of years.

The Corn Cultivator surpasses all other implements in the cultivation of corn, subduing the weeds and leaving the land nearly as level between the rows as before.

After the sward is broken the Fallow Cultivator renders further plowing unnecessary; subduing blue grass and all other vegetation better than plow and harrow—thus saving nearly one half the labor of putting in a crop of wheat.

They are much used for seeding, covering the seed deeper than the harrow, and not as deep as the plow, leaving the land in small ridges or drills, thus rendering the crop much less liable to winter kill.

They are cheap and durable and when tested are found to be more necessary than the harrow, and no good farmer will be without them.

Persons wishing to purchase teeth, rights of counties, or to engage in selling may address us, post-paid, at Akron, Ohio.

G. W. GRIFFITH & Co.

Akron, O., May, 184⁸—4t.

P. S. A supply of the above teeth may be found at Gills iron store, Broad street, Columbus.

Sale of Short Horned Cattle.

I Will sell at Buffalo, during the days of the State Fair, on 5th, 6th and 7th September next; under the directions of the officers of the N. Y. S Agricultural Society, twenty to twenty-five thorough bred short horned cattle. Catalogues and Pedigrees will be ready at the time of the fair.

Also, I will sell at the same time, fifty Merino Rams, bred from the Blakesly flock.

References. A. B. Allen, N. Y.: Sanford Howard and B. P. Johnson, Albany; Francis Rotch, Butternuts; and L. F. Allen, Black Rock. J. M. SHERWOOD.

Auburn, N. Y., May 16, 1848.

TURNIP SEED,

Of the following Valuable Varieties:

LARGE White Globe, White Norfolk, Red Round, Ruta Baga or Yellow Sweede—*used chiefly for stock feeding.*

White Stone, Yellow Stone, White Dutch, Yellow Dutch—*for table use.*

For sale at the Seed Store, north side of East Fifth street, Cincinnati, (formerly next door to the Dennison House.)

H. HUXLEY.

PETERS' BUFFALO WOOL DEPOT.

(SECOND YEAR.)

I HAVE established a Wool Depot upon the following plan: 1st.—The wool is thrown in 10 sorts; Merino wool being No. 1, the grades numbering down from 1 to 5; the coarsest common wool being No. 5. Saxony wool is thrown into extra, and prime 1 and prime 2. Combing and De Laines make 2 sorts more.

2nd.—I charge for receiving, sorting, storing and selling, *one cent per pound;* this includes all charges at the depot, except Insurance.

3d.—Sales are made for cash, except when otherwise directed by owner.

☞All wool consigned to me shou'd be marked with the owner's name.

Warehouse, corner of Washington and Exchange Streets.

Buffalo, January 1, 1848. T. C. PETERS

PATENT OFFICE.

GENERAL AGENCY FOR INVENTORS;

For the procuring of Patents, the sale, purchase and transfer of PATENT RIGHTS, and all business connected with the Patent Office.

DRAWINGS AND SPECIFICATIONS FOR THE PATENT OFFICE,

made according to the most approved methods. Information on subjects connected with patents, afforded at the office free of charge.

☞Letters post-paid, requiring information, attended to.

Instruction in Geometric Projection Isometric Perspective, and every kind of Mechanical Drawing. Drawings, Lithographs, Specifications and Engravings of Machinery, &c., &c.

GEO. H. KNIGHT.

Civil Engineer and Patent Agent, No. 5, West 4th street, next door to City Hotel, Cincinnati.

REFERENCES.

Hon. John McLean, Cincinnati; Hon. Wm Johnston, Cincinnati, W D Gallagher, Cincinnati; Hon Belamy Storer, do; George Shields, do; Hon. J C Wright, do; Hon T Walker, do; Patrick Collins, do; Assure Assur, Sharon; E Coffin, Richmond, Ia; G Baily M D, Washington; E Williams, Louisville; M B Bateham, Columbus; M Gilbert, do; C F McWilliams, Springfield.

March 15, 1848.

THRESHING MACHINES.

THE subscribers having purchased the right of making and selling for the State of Ohio,

PITT'S PATENT SEPARATOR,

Are now manufacturing the best lot of Machines ever offered in Ohio C. M. RUSSELL & CO.

Massillon, Stark county, April 1st, 1848.